

姓名：许贯诚

职称/职务：教授、博士、博士生导师

专业：无机化学

研究方向：纳米电催化剂、有机-无机杂化相变材料

出生年月：1980.11

联系方式：13579862811

邮箱：xuguancheng@xju.edu.cn

办公室：逸夫楼 321



个人经历

学习经历

1998.09-2002.07, 新疆大学化学化工学院, 本科生

2002.09-2005.07, 新疆大学化学化工学院, 硕士研究生

2005.09-2008.07, 南京大学化学化工学院, 博士研究生

工作经历

2008.07-2010.12, 北京大学化学与分子工程学院, 博士后

2010.12-至今, 新疆大学, 教师

主讲课程

本科生：《无机化学》、《工程化学》、《无机及分析化学》

硕士研究生：《超分子化学》、《专业英语》

博士研究生：《材料结构与性能》

研究内容

1. 自支撑多级结构纳米电催化剂
2. 有机-无机杂化相变材料
3. 碳基纳米功能材料

主持科研项目

1. 国家自然科学基金项目，PBA基双金属磷化物纳米阵列复合氮掺杂碳纳米纤维的制备及全水解催化性能研究（22065034），2021.01-2024.12，40万元，主持
2. 国家自然科学基金项目，有机铵卤化铟铁电材料的合成、结构及性质研究（21865033），2019.1-2022.12，41万，主持
3. 国家自然科学基金项目，有机胺为模板的金属(II)硫酸盐铁电材料的合成及性质研究（21361025），2014.1-2017.12，50万，主持
4. 国家自然科学基金项目，分子基磁电多铁性材料的合成及性质研究（21161019），2012.1-2015.12，55万，主持
5. 新疆维吾尔自治区杰出青年自然科学基金项目，有机胺为模板的新型分子基铁电材料的设计合成及性质研究（2013711008），2013.7-2016.7，50万，主持
6. 新疆维吾尔自治区天山英才工程第二期，吡啶啉酮缩酰肼席夫碱过渡金属配合物的合成、结构及抗肿瘤活性研究（400070010208），2018.1-2020.12，15万，主持

奖励情况:

刘浪、郭继玺、吴冬玲、张丽、许贯诚、刘岸杰、贾殿赠，吡啶啉酮席夫碱类化合物的合成及光化学性能，2015年度自治区科技进步奖一等奖，新疆维吾尔自治区人民政府，2016年

个人荣誉

- 2013年获新疆维吾尔自治区杰出青年科技人才
- 2013年获新疆大学第三届青年科研奖
- 2018年获新疆维吾尔自治区天山英才计划培养人选
- 2021年获新疆维吾尔自治区“天山雪松计划”科技创新领军人才后备人选

近三年代表性研究成果

1. Yin-Qiang Zhang, Guan-Cheng Xu*, Min Li, Two In-based organic-inorganic hybrid compounds with reversible phase transition derived from the order-disorder changes of cations or anions, *Dalton Trans.*, 2021, DOI: 10.1039/d1dt01935j.
2. Bei Wei, Guancheng Xu,* Jincheng Hei, Li Zhang, Tingting Huang, Qian Wang, CoFeP hierarchical nanoarrays supported on nitrogen-doped carbon nanofiber as efficient electrocatalyst for water splitting, *J. Colloid Interf. Sci.*, 2021, 602, 619-626.

3. Jincheng Hei, Guancheng Xu*, Bei Wei, Li Zhang, Hui Ding, Dejiang Liu, NiFeP nanosheets on N-doped carbon sponge as a hierarchically structured bifunctional electrocatalyst for efficient overall water splitting, *Appl. Surf. Sci.*, 2021, 549, 149297-1492.
4. Lijuan Yang, Hui Ding, Guancheng Xu*, Li Zhang, Bei Wei, Efficient ORR activity of N-doped porous carbon encapsulated cobalt electrocatalyst derived from a novel bimetal-organic framework, *Mater. Res. Bull.*, 2021, 138, 111237.
5. Bei Wei, Guancheng Xu*, Jincheng Hei, Li Zhang, Tingting Huang, PBA derived FeCoP nanoparticles decorated on NCNFs as efficient electrocatalyst for water splitting, *Int. J. Hydrogen Energ.*, 2021, 46, 2225-2235.
6. Yin-Qiang Zhang, Min Li, Guan-Cheng Xu*, Phase Transition and Dielectric Response Originating from Disorder-Order Transition in the In-Based Organic-Inorganic Hybrid Material $[\text{NH}_3(\text{CH}_2)_5\text{NH}_3][\text{InCl}_5(\text{H}_2\text{O})]\cdot\text{H}_2\text{O}$, *Eur. J. Inorg. Chem.*, 2021, 1251-1255.
7. Yin-Qiang Zhang, Min Li, Guan-Cheng Xu*, Reversible phase transition, switchable dielectric response in In(III)-based organic-inorganic hybrid compound: $[\text{C}_3\text{H}_8\text{N}]_3\text{InBr}_6$, *Appl Organomet Chem.*, 2021, e6354.
8. Hui Ding, Guan-cheng Xu*, Li Zhang, Bei Wei, Jin-cheng Hei, Liang Chen, A highly effective bifunctional catalyst of cobalt selenide nanoparticles embedded nitrogen-doped bamboo-like carbon nanotubes toward hydrogen and oxygen evolution reactions based on metal-organic framework. *J. Colloid Interf. Sci.*, 2020, 566, 296-303.
9. Liang Chen, Guan-cheng Xu,* Gui Xu, and Li Zhang, CoP/N-doped carbon nanowire derived from Co-based coordination polymer as efficient electrocatalyst toward oxygen evolution reaction, *Energy Technol.*, 2020, 8, 1901419.
10. Min Li, Guan-cheng Xu,* Wen-bo Xin, Yin-qiang Zhang, Switchable dielectric behavior and order-disorder phase transition in a new organic-inorganic hybrid compound: $(\text{CH}_3\text{NH}_3)_4[\text{InCl}_6]\text{Cl}$, *Eur. J. Inorg. Chem.*, 2020, 626-630.
11. Min Li, Guan-Cheng Xu*, Yin-Qiang Zhang, Wen-Bo Xin, Phase transition, dielectric switching property of an In (III)-based organic-inorganic hybrid compound: $(\text{C}_5\text{H}_{16}\text{N}_2)\text{InBr}_5$, *J. Solid State Chem.*, 2020, 287, 121329.
12. Min Li, Guan-Cheng Xu*, Wen-Bo Xin, Yin-Qiang Zhang, A A In (III)-based organic-inorganic hybrid compound: $(\text{C}_4\text{H}_7\text{N}_2)_4[\text{InBr}_6][\text{InBr}_4]\cdot 2\text{H}_2\text{O}$ with a two-step phase transition and switchable dielectric property, *Polyhedron*, 2020, 189, 114725.
13. Liang Chen, Guan Cheng Xu*, Gui Xu, Li Zhang, Hui Ding, Co-based coordination polymer-derived Co_3S_4 nanotube decorated with NiMoO_4 nanosheets for effective oxygen evolution reaction, *Int. J. Hydrogen Energ.*, 2020, 45, 30463-30472.
14. Li-juan Yang, Shi-zhan Feng, Guan-cheng Xu,* Bei Wei, Li Zhang, Electrospun MOF-based FeCo nanoparticles embedded in nitrogen-doped mesoporous carbon nanofibers as an efficient bifunctional

catalyst for oxygen reduction and oxygen evolution reactions in Zinc-air batteries, *ACS Sustainable Chem. Eng.*, 2019, 7, 5462-5475.

15. Wen-bo Xin, Guan-cheng Xu* and Min Li, Synthesis and characterization of a new organic-inorganic hybrid ferroelectric: $(C_4H_{10}N)_6[InBr_6][InBr_4]_3 \cdot H_2O$, *Dalton Trans.*, 2019, 48, 17402-17407.

16. Li-juan Yang, Guan-cheng Xu*, Jin-jin Ban, Li Zhang, Gui Xu, Yan Lv, Dian-zeng Jia*, Metal-organic framework-derived metal-free highly graphitized nitrogen-doped porous carbon with a hierarchical porous structure as an efficient and stable electrocatalyst for oxygen reduction reaction, *J. Colloid Interf. Sci.*, 2019, 535, 415-424.

17. Jun Wang, Guan-Cheng Xu*, Yan-Ping Zhang, Hua-Ying Luo, Jin-Yao Li*, Li Zhang, Dian-Zeng Jia, Copper(II) complexes with 4-acyl pyrazolone derivatives and diimine coligands: synthesis, structural characterization, DNA binding and antitumor activity, *New J. Chem.*, 2019, 43, 2529-2539.

18. Qing-Xia Zeng, Guan-Cheng Xu*, Li Zhang, Yan Lv, Porous Cu_2O microcubes derived from a metal-formate framework as photocatalyst for degradation of methyl orange, *Mater Res Bull.*, 2019, 119, 110537.

19. Yanping Zhang, Yue Li, Guancheng Xu*, Jinyu Li, Huaying Luo, Jinyao Li, Li Zhang, Dianzeng Jia, Synthesis, crystal structure, DNA/bovine serum albumin binding and antitumor activity of two transition metal complexes with 4-acyl pyrazolone derivative, *Appl. Organometal Chem.*, 2019, 33, e4668.

20. Jin-jin Ban, Guan-cheng Xu*, Li Zhang, Gui Xu, Li-juan Yang, Zhi-peng Sun, Dian-zeng Jia*, Efficient Co-N/PC@CNT bifunctional electrocatalytic materials for oxygen reduction and oxygen evolution reactions based on metal-organic frameworks, *Nanoscale*, 2018, 10, 9077-9086.

21. Gui Xu, Guan-cheng Xu*, Jin-jin Ban, Li Zhang, He Lin, Chun-lin Qi, Zhi-peng Sun, Dian-zeng Jia*, Cobalt and cobalt oxides N-codoped porous carbon derived from metal-organic framework as bifunctional catalyst for oxygen reduction and oxygen evolution reactions, *J. Colloid Interf. Sci.*, 2018, 521, 141-149.

22. Qing-xia Zeng, Guan-cheng Xu*, Li Zhang, He Lin, Yan Lv, Dian-zeng Jia*, Porous CuO nanofibers derived from a Cu-based coordination polymer as a photocatalyst for the degradation of rhodamine B, *New J. Chem.*, 2018, 42, 7016-7024.